

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A vibration correcting optical device, comprising:
 - a vibration detection unit that detects a vibration of the vibration correcting optical device and outputs a vibration detection signal corresponding to the vibration;
 - a vibration state judgment unit that judges a state of the vibration of the vibration correcting optical device to be one of at least three states, based upon the vibration detection signal;
 - an image vibration correcting optical system that corrects an image vibration caused by the vibration of the vibration correcting optical device;
 - a drive unit that drives the image vibration correcting optical system based upon a drive signal;
 - a drive signal arithmetic operation unit that calculates the drive signal based upon the vibration detection signal and outputs the drive signal to the drive unit;
 - a drive signal calculation control unit that controls a method for calculating the drive signal adopted at the drive signal arithmetic operation unit in conformance to the state of the vibration ascertained through a judgment executed by the vibration state judgment unit;
 - and
 - a mode switch for selectively switching to at least one of a first mode and a second mode of control to be implemented by the drive signal calculation control unit,wherein:
 - in the first mode, the control implemented by the drive signal calculation control unit is automatically switched based on the state ascertained by the vibration state judgment unit, and

in the second mode, the control implemented by the drive signal calculation control unit enables the image vibration correcting optical system to correct image vibration independent of the state ascertained by the vibration state judgment unit.

2. (Original) A vibration correcting optical device according to claim 1, further comprising:

a reference value calculation unit that obtains through an arithmetic operation a reference value to be used as a reference in processing the vibration detection signal based upon the vibration detection signal, wherein:

the vibration state judgment unit judges the state of the vibration of the vibration correcting optical device based upon the vibration detection signal and the reference value; and

the drive signal arithmetic operation unit calculates the drive signal based upon the vibration detection signal and the reference value.

3. (Previously Presented) A vibration correcting optical device according to claim 1, wherein:

the drive signal arithmetic operation unit comprises a low pass filter having a cutoff frequency through which the vibration detection signal passes; and

the drive signal calculation control unit sets the cutoff frequency according to the state judged by the vibration state judgment unit.

4. (Previously Presented) A vibration correcting optical device according to claim 3, wherein:

the vibration state judgment unit judges the state of the vibration to be one of a normal vibration state, a first abnormal vibration state and a second abnormal vibration state; and

the drive signal calculation control unit sets the cutoff frequency in the normal vibration state lower than at least one of the cutoff frequency in the first abnormal vibration state and the cutoff frequency in the second abnormal vibration state.

5. (Previously Presented) A vibration correcting optical device, comprising:
 - a vibration detection unit that detects a vibration of the vibration correcting optical device and outputs a vibration detection signal corresponding to the vibration;
 - a vibration state judgment unit that judges a state of the vibration of the vibration correcting optical device;
 - an image vibration correcting optical system that corrects an image vibration caused by the vibration of the vibration correcting optical device;
 - a drive unit that drives the image vibration correcting optical system based upon a drive signal;
 - a drive signal arithmetic operation unit that calculates the drive signal based upon the vibration detection signal and outputs the drive signal to the drive unit;
 - a drive signal calculation control unit that controls a method for calculating the drive signal adopted at the drive signal arithmetic operation unit in conformance to the state of the vibration ascertained through a judgment executed by the vibration state judgment unit;
 - and
 - a reference value calculation unit that obtains through an arithmetic operation a reference value to be used as a reference in processing the vibration detection signal based upon the vibration detection signal, wherein:
 - the drive signal calculation control unit sets a number of sets of sampling data of the vibration detection signal according to the state judged by the vibration state judgment unit.

6. (Previously Presented) A vibration correcting optical device according to claim 5, wherein:

the vibration state judgment unit judges the state of the vibration to be one of a normal vibration state and an abnormal vibration state; and

the drive signal calculation control unit sets the number of sets of sampling data of the vibration detection signal in the normal vibration state larger than the number of sets of sampling data of the vibration detection signal in the abnormal vibration state.

7. (New) A vibration correcting method comprising:

detecting a vibration with a vibration detection sensor;

judging a state of the detected vibration to be one of at least three states based upon the detected vibration, the at least three states including a normal vibration state that does not contain a vibration intended by a photographer, a first abnormal vibration state that contains a vibration intended by the photographer to a predetermined extent and a second abnormal vibration state that contains a vibration intended by the photographer to an extent more than the first abnormal vibration state; and

correcting an image vibration caused by the detected vibration according to one of the at least three states.

8. (New) A vibration correcting method according to claim 7, wherein the vibration intended by the photographer is caused by a panning photographing operation by the photographer.

9. (New) A vibration correcting method according to claim 7, wherein:

the state of the detected vibration is judged to be the first abnormal vibration state when a signal output from the vibration detection sensor contains a high frequency component with a frequency lower than a predetermined value; and

the state of the detected vibration is judged to be the second abnormal vibration state when a signal output from the vibration detection sensor contains a high frequency component with a frequency equal to or higher than the predetermined value.

10. (New) A vibration correcting method comprising:
detecting a vibration with a vibration detection sensor;
judging a state of the detected vibration to be one of at least three states based upon the detected vibration;
judging a state of an operation switch that can be operated by a photographer;
and
correcting an image vibration caused by the detected vibration based upon one of the at least three states and the state of the operation switch.

11. (New) A vibration correcting method according to claim 10, wherein the at least three states include a normal vibration state that does not contain a vibration intended by a photographer, a first abnormal vibration state that contains a vibration intended by the photographer to a predetermined extent and a second abnormal vibration state that contains a vibration intended by the photographer to an extent more than the first abnormal vibration state.

12. (New) A vibration correcting method according to claim 10, wherein the operation switch is a switch to be set to designate whether the photographer is in a steady state or in an unsteady state.

13. (New) A vibration correcting method according to claim 12, wherein the unsteady state is a state that the photographer is riding in a vehicle.

14. (New) A vibration correcting method according to claim 12, wherein the image vibration is corrected based upon one of the at least three states when the operation switch is set to designate the steady state.

15. (New) A vibration correcting method according to claim 12, wherein the image vibration is corrected regardless of the at least three states when the operation switch is set to designate the unsteady state.

16. (New) A vibration correcting method according to claim 10, wherein the operation switch is a shutter release switch.